



172093



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
230 SOUTH DEARBORN ST.
CHICAGO, ILLINOIS 60604

167

September 30, 1991

REPLY TO ATTENTION OF:
SHS-11

Joe Adams
Warzyn Engineering Inc.
2100 Corporate Drive
Addison, Illinois 60101

Dear Mr. Adams:

Enclosed you will find U.S. EPA comments on the revised Feasibility Study Report for the ACS site provided to me on September 9, 1991. Based on our August 7, 1991, meeting, I had expected my review of this document to be quick and simple, basically approving the agreed upon changes. Unfortunately, nearly one-third of the 192 comments were either inadequately addressed or ignored completely. This is especially surprising considering our August 7 meeting where only 20-25 comments were brought up for discussion by Warzyn (At that time I felt all were mutually resolved; as I indicated in my August 14 meeting summary). Additionally, Warzyn did not contact me during the revision period to communicate problems encountered revising the FS.

I have provided some direction below on Agency comments that you need to revisit. Comments that don't necessarily require text modification should be addressed in a cover letter to the revised document. Any past or current additions to the FS not made in response to an Agency comment should be explained. I suggest we meet to discuss my comments at 1:00 pm on Tuesday, October 1, 1991. We can discuss a due date for a revised FS at that time.

Sincerely,

Wayne M. Hartwick, RPM

Enclosure

cc: K. Street, USEPA
S. Siegel, USEPA
J. Manley, IDEM
J. Burton, Weston
P. Vagt, Warzyn
A. Perellis, PRP Steering Committee

General Comments on the Revised Feasibility Study Report

U.S. EPA had requested a model on estimating the time required and costs associated with cleaning up the "offsite" aquifer. Warzyn had indicated that model development was premature at this point in time. I see no reason why computer modeling at this juncture would be premature. This appears to be the perfect time to investigate methods of restoring the "offsite" aquifer to beneficial use.

It had been agreed that Alternatives 3 & 6 would be expanded to estimate the cost associated with removal of different quantities/risk levels of material. This is needed by the Agency in order to have a comprehensive array of alternatives to choose from. Warzyn indicated (on the day the report was delivered) that they had insufficient data to perform the necessary calculations. The Agency disagrees with this assertion and maintains that Warzyn perform the agreed upon calculation estimates.

Warzyn had agreed to provide one backup sheet on cost estimates for each alternative. This was done as an addendum to Appendix 5, however, Appendix 5 should be expanded to include a comparable level of detail outlined in Attachment 5 of the original Agency comments.

Specific Comments on the Revised Feasibility Study Report

Agency comment

13. Section 1.6, p. 1-29, paragraph 1 - Breakup second added sentence into two sentences. The second sentence should begin, "If risks..." Delete the second paragraph, it gives the impression the RA is a worthless exercise.
16. Section 1.6.1, p. 1-29, paragraph 1 - Add, "reasonable" after, "upon" in the first added sentence.
19. Section 1.6.3, p. 1-30 - Add as the first sentence, "The current-land use scenario is a reasonable worst case situation that could occur if the site is left unchecked and unremediated with no action taken to minimize any migration from or direct exposure to contaminants at the site."
23. Section 1.6.3, p. 1-31 - Recognize that bullets must be reevaluated based on the final Baseline Risk Assessment.
26. Section 1.6.4, p. 1-32, paragraph 1 - Delete the added sentence. Delete, "unlikely" in the last sentence of the first paragraph.

27. Section 1.6.5, p. 1-32 - This summary will be reviewed once the Ecological Assessment is finalized.
30. Section 2.1, p. 2-2, second bullet - Add the following to the end of the bullet, "... consistent with the risk levels defined in the ecological assessment."
32. Section 2.1, p. 2-3, second bullet under Landfill - Add, "contaminated soils, sediments, surface water, and groundwater" after, "leachate."
40. Section 2.5.2.4, p. 2-22, Dechlorination - If your basic assumptions are true then I have no problem, however, I recently attended a seminar where dechlorination was discussed using a different reagent. I will supply you with more details when available.
- 47-
50. Comments may need to be addressed depending on the final Baseline Risk Assessment.
53. Section 3.1.2, p. 3-3, third bullet - Was the assumption discussed in this comment deleted simply because it referred to the landfill?
58. Section 3.3.2, p.3-13, Cost - The bullet on constructing a slurry wall between the offsite containment area and the Griffith Landfill was added on the previous page but not considered in the cost discussion.
59. Section 3.3.3, p. 3-14, first paragraph - No discussion on the changes in wetland hydrology were included here.
63. Section 3.3.4.1, p. 3-16, Implementability - Include a discussion on the 12 inch sewer line.
66. Section 3.3.4.2, p.3-18, first paragraph, last sentence - Eliminate the added sentence and add the following, "Discharge of treated ground water to the wetlands could be potentially detrimental by radically changing the hydrologic balance. This might result in many species of plants and animals being eliminated or stressed by introducing a current or increasing water volume. Discharge would therefore have to be carefully controlled to prevent impacting existing plants and animals."
67. Section 3.3.4.2, p.3-18, first paragraph - After, "hydrophobic contaminants" add, "or pH dependent contaminants (e.g. metals)"
72. Section 3.3.6.1, p.3-21, first paragraph - The sentence, "Clay-soil caps would be used in all other areas." should be deleted. This assumption may not be true if soils within the

risk range are left in place. RCRA cap ARARs must be considered.

76. Section 3.5.1.1, p.3-39, first paragraph - The suggested deletion was not made and an expanded discussion was not included. Please refer to the referenced directive for guidance.
79. Section 3.6.2.3, p.3-54, last paragraph, last sentence - You still need a period here.
- 81-
84. Comments may need to be addressed depending on the final Baseline Risk Assessment.
87. Section 4.1.2, p.4-2, first paragraph - The requested table summarizing assumed cleanup levels should be generated.
88. I found no addendum to Table 4-8. Correction, It was addressed but not included in the right place.
- . In Section 4.1.2, beginning on p. 4-3, a discussion was presented on why Warzyn can't do the risk/volume calculations we asked for. Why was 10 ppm considered the "appropriate level for soil volume delineation?" What is the risk level associated with this? Please include a discussion on how this level relates to assumed cleanup standards developed pursuant to comment #87.
90. Section 4.1.3, p.4-9 - On which U.S. EPA guidance documents is the 5% discount rate based?
96. Section 4.2.3, p.4-12 - Modeling is needed as discussed in the original comment.
102. Section 4.2.4.2, p.4-18, paragraph 2 - It should be stated that attempts to flush metals and hydrophobic contaminants from wetlands is unlikely to be effective.
103. Section 4.2.6.1, p.4-19, paragraph 2 - The discussion should also include that capping may be used to prevent short circuiting of the vapor extraction system and limit the dewatering of the upper aquifer due to excess precipitation. The discussion of the one-foot clay-soil cap in the first paragraph may not be appropriate.
104. Section 4.2.7.1-4 - Was the table requested in this comment ever produced?
105. Section 4.2.7.1, p.4-22, paragraph 3 - Original comment was not addressed.

113. Section 4.2.7.4, p.4-35, last paragraph - The problem of discharging warm water to natural surface water was addressed, however, it was discussed that if a heat exchanger is needed, capital and O & M costs would increase for the air stripping process option. Were these increases accounted for in Appendix B cost estimates?
116. Section 4.2.8.2, p.4-40, first complete paragraph - The requested deletion was not made. Please delete sentences 4 & 5 in the first full paragraph on p.4-40 and provide a complete discussion on why a variance on land-ban treatment standards may be appropriate (see comment #76).
124. Section 4.3.2, p.4-44, first paragraph - The added provision of contaminated surface soils covered, "with a soil cover" may not be appropriate. It must be stated what the purpose of the soil cover is; prevent infiltration or dermal contact only? This should be discussed in the ARARs section of Alternative 2.
- . On page 4-45, the three added paragraphs were included in response to which comment? How were the 10ppm total VOC and 50 ppm PCB contaminant criteria selected? Once a final Ecological Assessment is in, this passage will need to be revisited.
129. Section 4.3.2, p.4-47, second paragraph - It should be noted that optimization of the system, possibly including an aggressive pump and treat system, will occur prior to the end of the 30-year time period to try to meet ARAR levels.
135. Section 4.3.3, p.4-50, third paragraph - The original comment asked for (among other things) a more thorough explanation on why 2% was chosen as a cutoff point for the treatment of buried wastes in this alternative. Now I see you've changed it to 1%. Why the change? Please address the other questions posed in this comment.
136. Section 4.3.3, p.4-51, second full paragraph - This comment pertaining to the utilization of a catalytic incinerator was not addressed. Please include a discussion.
140. Section 4.3.3, p. 4-54, third paragraph - As mentioned in the previous comment, please include a discussion on the use of a catalytic incinerator.
141. Section 4.3.3, p.4-55, third paragraph, last sentence - Delete the word, "may" and add, "will likely."
150. Section 4.3.5, p.4-65 - Alternative 5 title should read, "Offsite incineration of buried drums and offsite disposal of miscellaneous debris." Also, as outlined in the original

comment, removal of Kapica/Pazmey soils should be included in the title.

152. Section 4.3.5, p.4-66, second paragraph - You have established that the VOC contaminant "matrix" is similar between Verona Site and ACS. Now include a discussion on how Verona Site results can be extrapolated to likely concentrations at the ACS site. Also, change, "U.E. EPA" to, "U.S. EPA."
154. Section 4.3.5, p.4-68, paragraph 3 - It should be added that, "it is unlikely that PCBs and other semi-volatile compounds would be "flushed" from wetland sediments during discharge."
156. Section 4.3.5, p.4-69 - The point of this comment was that it may be difficult to extract VOCs due to the large number of SVOCs in the waste matrix. This should be included as a possible disadvantage in a separate paragraph.
157. Section 4.3.5, p.4-70, first paragraph - Capping of residuals may have to meet RCRA & TSCA technical standards.
159. Section 4.3.5, p.4-72, second paragraph - It must be stated at the end of the paragraph that, "these compounds of concern may present a risk in excess of the risk range under the future land-use scenario."
161. Section 4.3.5, p.4-74, second paragraph - Add to the end, "Proper capping of the onsite area could aid in minimizing these problems by reducing the amount of infiltration into the vapor extraction areas."
164. Section 4.3.6, Alternative 6B - Please include a discussion on using a catalytic incinerator in conjunction with the SVE system and air stripper.
167. Section 4.3.6, Alternative 6B, Compliance with ARARS - A discussion on discharge or reinjection to the site wetlands or upper aquifer should be added.
169. Section 4.3.7, p.4-85, second paragraph - The advantages of using an air stripper with the LTTT system should be mentioned in this paragraph.
172. Section 4.3.7, p.4-89, paragraph 1 - A statement that, "The reduction of toxicity and volume is not demonstrated for future site users." should be added.
175. Section 4.3.8, p.4-94, first paragraph - After, "treatment cells" add, "(within the current area of contamination(AOC))."

176. Section 5.0 - A section discussing the nine criteria for the Griffith Landfill may have to be added depending on the Baseline Risk Assessment.
184. Section 5.1, p.5-3, fifth paragraph, last sentence - The following should be added, "...but would only marginally reduce the possibility of exposure to contaminated soils by future onsite users of the facility."
186. Section 5.3, p.5-5 - The changes made in the Long-Term Effectiveness and Permanence section don't appear to reflect the suggestions made in the original comment.
187. Changes don't appear to reflect suggestions made in the original comment.
188. Section 5.4, p.5.7, third paragraph - Delete the first sentence; it's misleading and presents Alternative 2 as equal to the other Alternatives.
189. Not Addressed.
192. Not Addressed.
193. There were numerous suggestions posed in this original comment. Many deal with providing vendor quotes that would help USEPA determine if Warzyn estimates are accurate. Warzyn indicated in our August 7 meeting that providing meaningful vendor quotes would be difficult due to their inherent variability and due to the typical vendor low-ball approach to make their technology more effective. USEPA agreed to be flexible in requiring Warzyn to submit vendor quotes, however, the backup sheets provided in Appendix B need more detail.

There are many other questions posed in comment #193 that were not addressed. If these questions were addressed someplace else, then indicate where.